

## **ABSTRACT**

The present invention provides a method for preparing a polynucleotide comprising a nucleotide sequence having an activity of regulating the translation efficiency of a template in a protein synthesis system, characterized by: (a) supplying one or more types of template comprising any nucleotide sequence to a protein synthesis reaction system; (b) recovering a polyribosomal fraction from the reaction solution after the reaction; and (c) collecting the polynucleotide comprising the nucleotide sequences in the template contained in the polyribosomal fraction. Also provided are a novel polynucleotide having an activity of regulating the translation efficiency produced by this method, and a protein synthesis method using a template comprising this polynucleotide.